MANPOWER SYSTEMS ANALYSIS PROGRAM

Naval Postgraduate School
Graduate School of Business and Public Policy

March 29, 2004

Mission

➢ To educate officers in the design, analysis, and management of manpower, personnel, and training systems

➢ To conduct research that supports the

- Navy's HR Strategy
  - CNO and CNP MPT/HR Initiatives
  - Seapower-21
- Sea Warrior

Graduate School of
**BUSINESS &
PUBLIC POLICY**

➢ Graduate Degree Programs

- Manpower Systems Analysis (MSA)
- Information Sciences
- Operations Research
- Human Factors Integration (HSI)

Non-Resident Education

- **Manpower Short Courses**
  - Continuous Learning for HR Officers
- **Non-Resident Graduate Education**
  - Joint MBA at Univ. of Maryland
  - Executive MBA
  - LEAD Program at Naval Academy
- **Senior Executive Seminars**
- **JPME Phase I**

- ➢ NPS educational opportunities for HR officers
  - ▪ MBA in Manpower Systems Analysis
    - • Thesis
    - • 3130P Subspecialty Code
  - ▪ Preparation for SHRM Certification
    - • AQD (RA1 and RA2)
  - ▪ JPME Phase I
  - ▪ Navy MPT/HR 3-day course
  - ▪ Seminars for advanced HR officers

➢ MPT Research Conducted in:
- Graduate School of Business and Public Policy
- Information Sciences
- Operations Research (OA and HSI)
- Defense Resources Management Institute
- Research Institutes and Centers

➢ Research Cooperation
- Co-located with DMDC
- Cooperation with Naval Academy

Faculty Expertise

Cost-Benefit Analysis   Manpower Modeling

Manpower Requirements   Organization Behavior

Decision Support Systems   Cost Estimation

Force Structure   Optimization

Training Simulation

Selection and   Youth Market Analysis

  Classification   Human Factors

Recruiting   Retention Analysis

- Research on supply-related topics:
  - Requirements and Recruiting
  - Attrition
  - Reenlistment
  - Officer Career Paths
  - Distribution

- Developed web-based market prototype (Virtual Personnel Mall)
- Modified two-sided matching markets for enlisted detailing applications
- Compared human detailers, two-sided matching and optimization, with and without AIP
  - Experimental and simulation models
  - Based on AS community
- Designed enlisted detailing process description to incorporate web-based markets

- LCS Manning study
  - Ships Force
  - Air Detachment
- Recruiting Station Location
- Recruiter Productivity
- Recruiter Intel Agent Modeling
- Analysis of Non-Prior Service Reservists

- CNRC's Recruit Quality Matrix (Screen)

- Analysis of DEP attrition

- Success of GED Recruits

- Analysis of Performance of the Officer Lateral Transfer and Redesignation Process
- Comparison of Officer Promotion Systems
- Commissioning Source and Officer Promotion and Performance
- Ship Officer Staffing Guide

Role of Thesis Students

- Theses refine HR competencies and develop critical MPT/HR skill sets

- Analyze emerging manpower issues

- Provide valuable assistance to N1 and HQ USMC manpower and personnel analysts

- 500+ technical reports, published articles, conference presentations since inception of program

- MSA Curriculum Website:
  - www.sm.nps.edu/msa
- Prof. Stephen Mehay:
  - smehay@nps.edu
- CDR William Hatch:
  - wdhatch@nps.edu

BACK-UP SLIDES

- Buttrey, Samuel **Assistant Professor, PhD, UC Berkeley.
DCSPER Chair of Manpower Modeling.**
- Crawford, Alice **Senior Lecturer, MA, San Diego State Univ. Personnel Training, Leadership Development.**
- Dolk, Daniel **Professor, PhD, University of Arizona. Management Information Systems, Decision Support Systems.**
- Eitelberg, Mark **Professor, PhD, New York University. Military Manpower Policy.**
- Gates, William **Associate Professor, PhD, Yale University. Intelligent Agent Modeling, Manpower Costing.**
- Gue, Kevin **Assistant Professor, PhD, Georgia Tech. Optimization Models, Recruiting Analysis.**
- Hocevar, Susan **Assistant Professor, PhD, Univ. of Southern Cal. Organizational Analysis, Survey Methods.**

- Kamel, Magdi **Associate Professor, PhD, Univ. of Pennsylvania Management Information Systems.**

- Kang, Keebom **Associate Professor, PhD, Purdue University. Manpower Modeling, Recruiting Analysis.**

- Mehay, Stephen **Professor, PhD, UCLA.   Manpower Analysis and Modeling.**

- Nissen, Mark **Assistant Professor, PhD, Univ. of Southern Cal. Decision Support Systems, Intelligent Agent Modeling.**

- Pema, Elda **Assistant Professor, Ph.D., Michigan State Univ.   Personnel Economics**

- Raymond Franck, **Visitng Professor, Ph.D., Harvard University.   Defense Economics.**

- Roberts, Benjamin **Senior Lecturer, PhD, Penn State Univ. Job Design, Executive Education, Personnel Processes.**
- Rosenthal, Richard **Professor, PhD, Georgia Tech. Optimization, Manpower Modeling.**
- Simon, Cary **Assistant Professor, DBA, U.S. International Univ. Strategic Management, Organizational Analysis.**
- Thomas, Gail **Associate Professor, EdD, Arizona State Univ. Management Communications, Diversity Analysis.**
- Thomas, George **Professor/Academic Associate, PhD, Purdue Univ. Managing Diversity, Executive Education,**
- Webb, Natalie **Associate Professor, PhD, Duke. Manpower economics**.

Navy HR System

"Spaces"

MANPOWER REQUIREMENTS

MANPOWER PROGRAMMING

Strategy

Determination End Strength

Validation   PPBS

Authorization

Research

Readiness

Allocation

Placement

Assignment

Strength planning
Community Mgt

Recruiting

Training

PERSONNEL DISTRIBUTION

PERSONNEL PLANNING

"Faces"